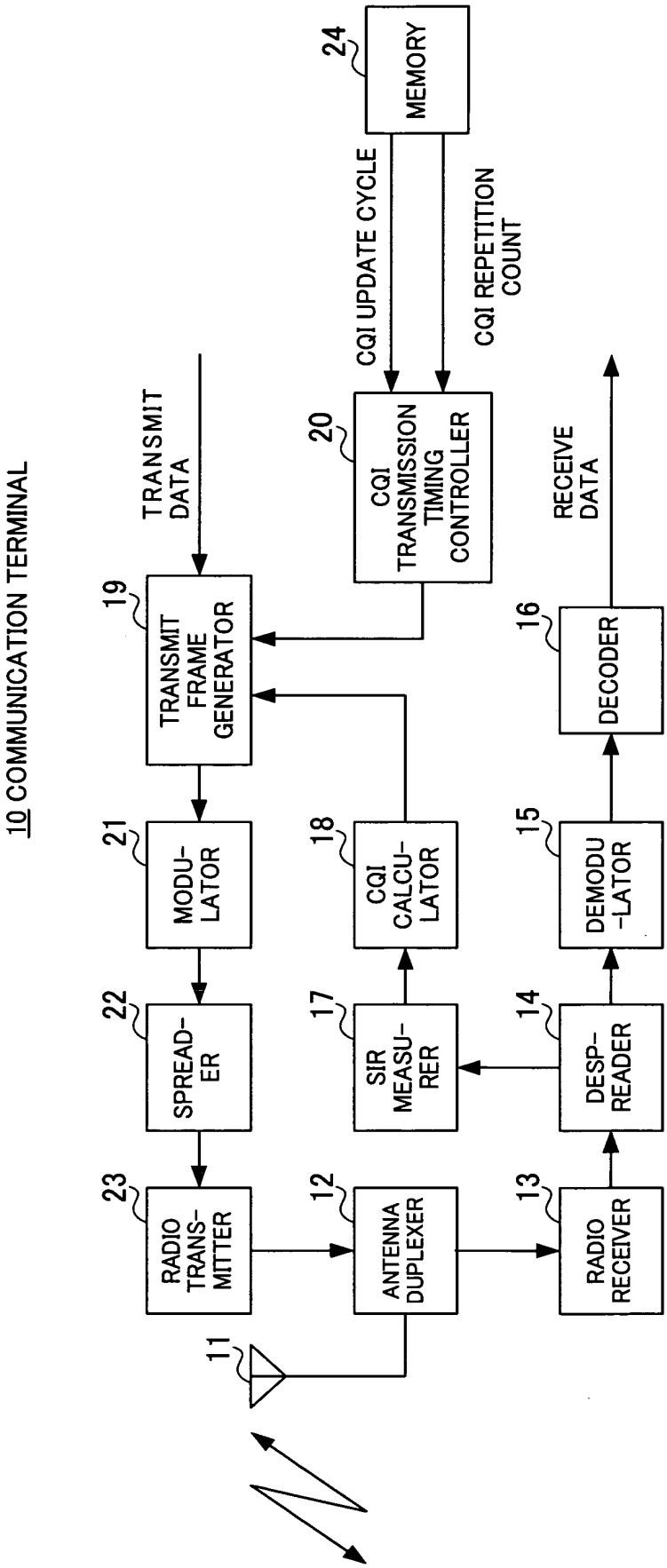
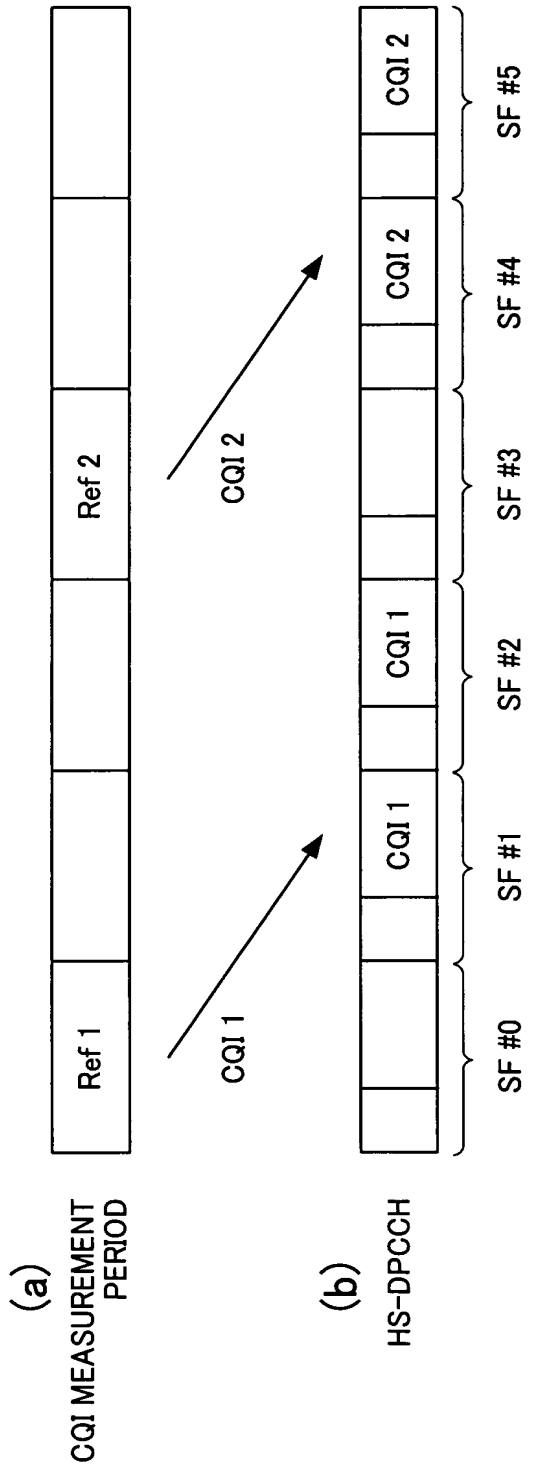
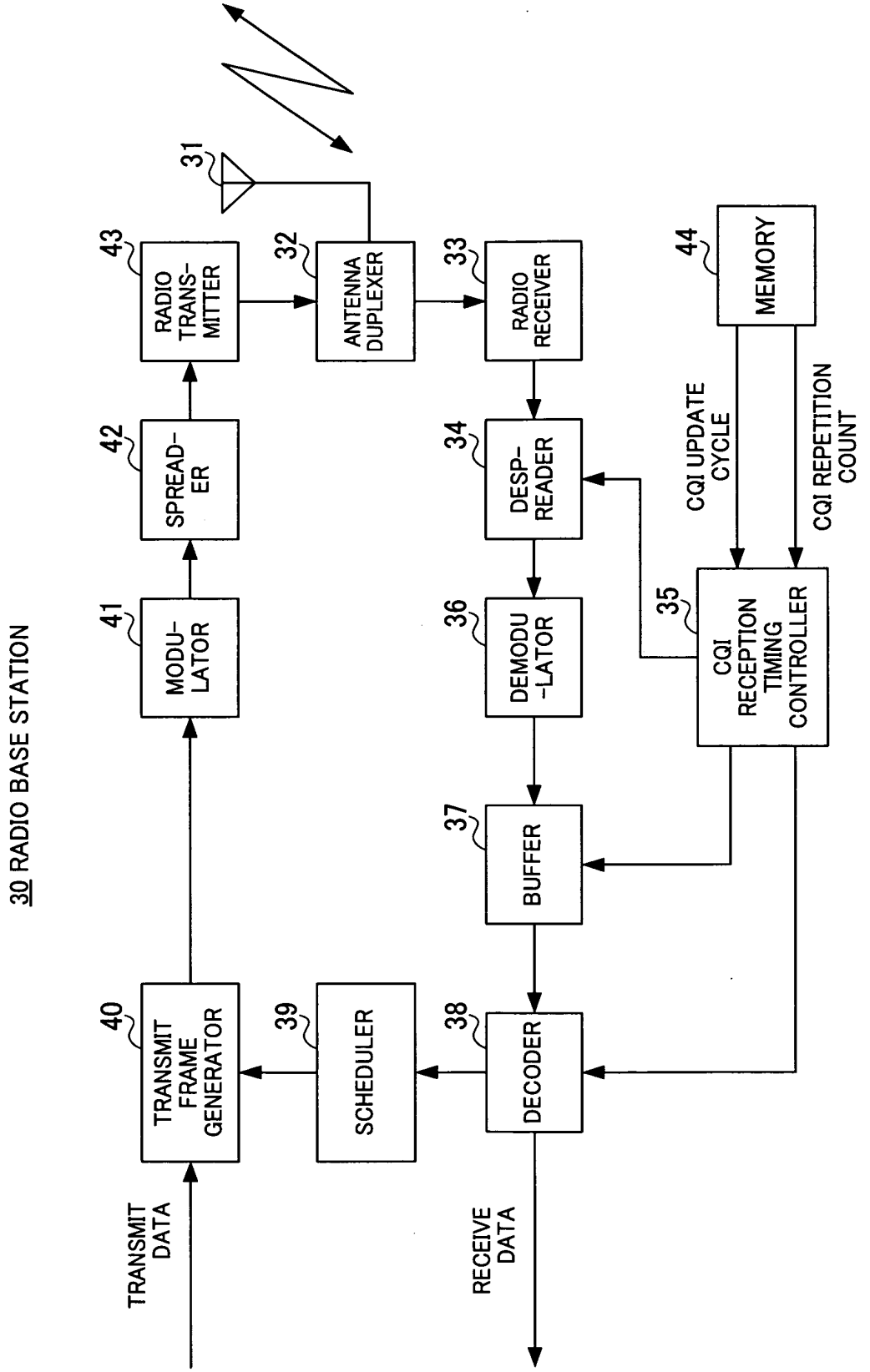


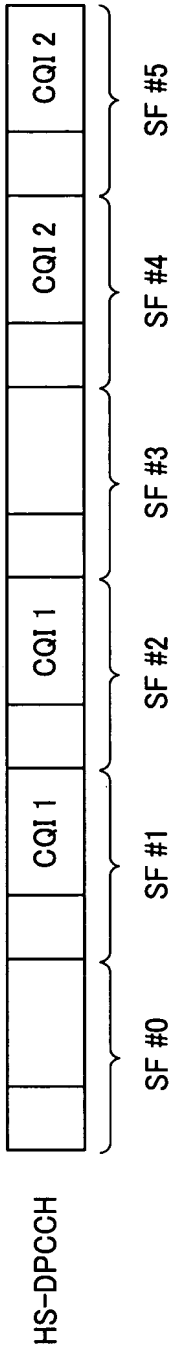
(PRIOR ART)
FIG.1



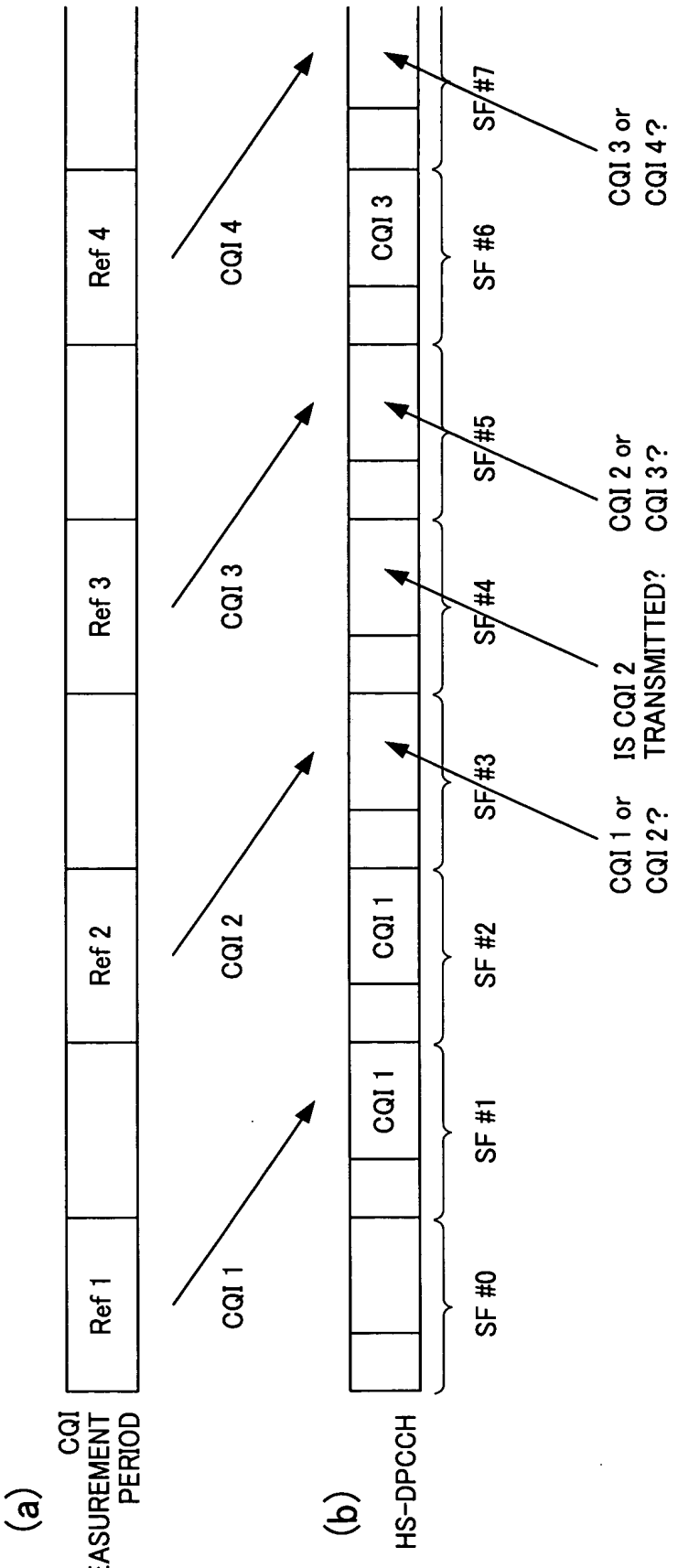
(PRIOR ART)
FIG.2



(PRIOR ART)
FIG.3



(PRIOR ART)
FIG.4



(PRIOR ART)
FIG.5

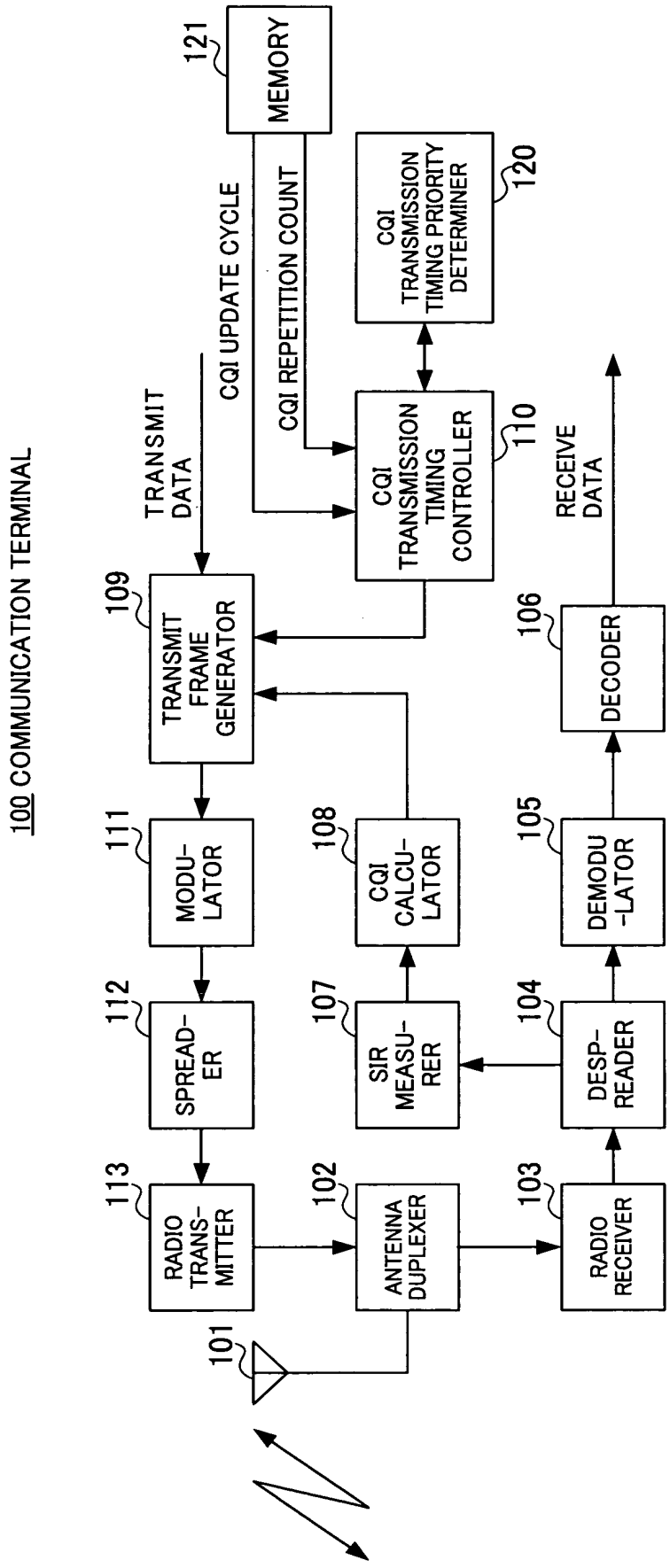

100 COMMUNICATION TERMINAL
121
MEMORY
CQI TRANSMISSION TIMING PRIORITY DETERMINER
120
CQI REPETITION COUNT
CQI UPDATE CYCLE
TRANSMIT DATA
CQI TRANSMISSION TIMING CONTROLLER
110
RECEIVE DATA
109
TRANSMIT FRAME GENERATOR
106
DECODER
111
MODU-LATOR
108
CQI CALCU-LATOR
105
DEMODU-LATOR
112
SPREAD-ER
107
SIR MEASU-RER
104
DESP-READER
113
RADIO TRANS-MITTER
102
ANTENNA DUPLEXER
103
RADIO RECEIVER
101

FIG.6

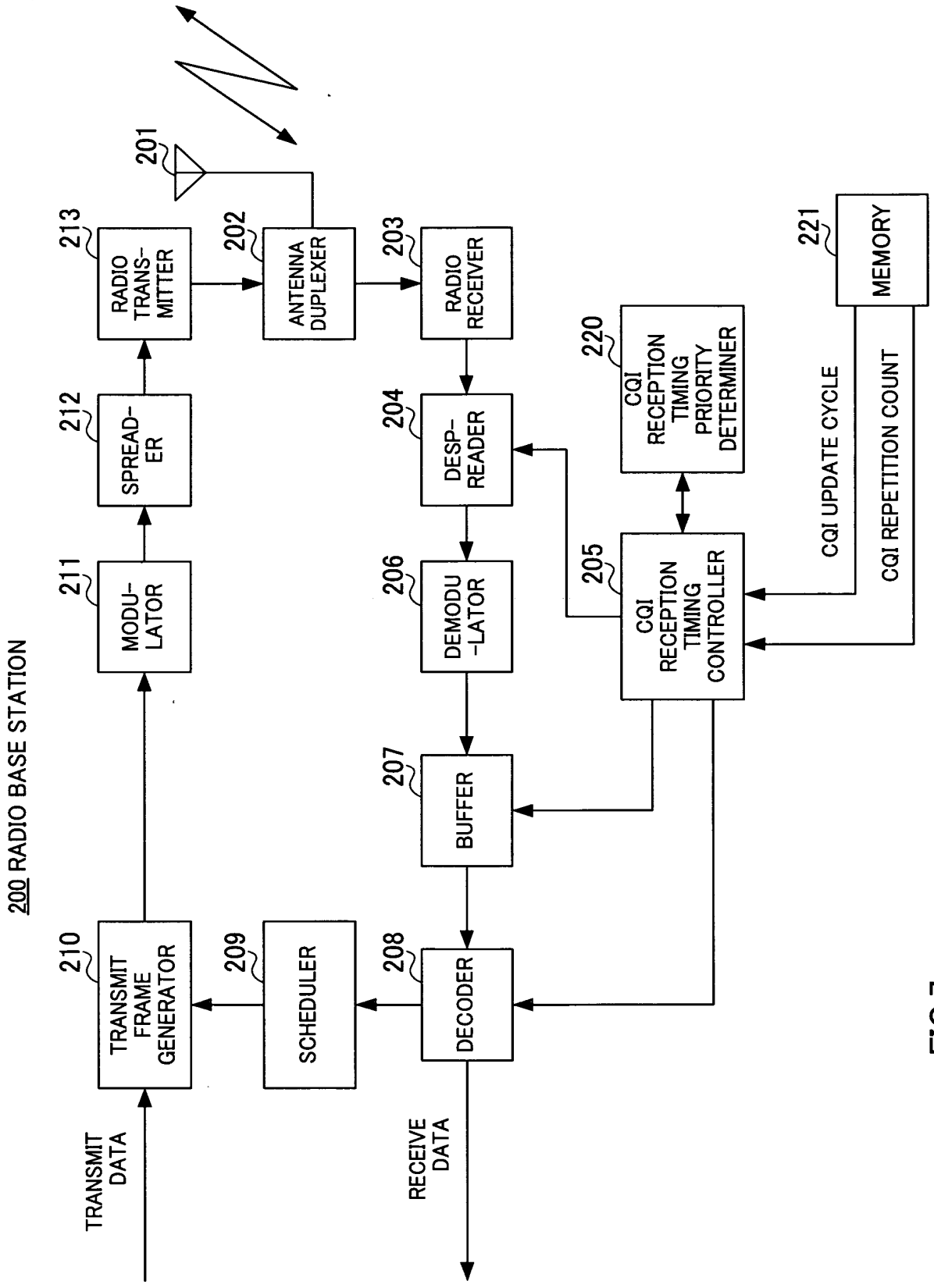

200 RADIO BASE STATION
TRANSMIT DATA
RECEIVE DATA
201
202 ANTENNA DUPLEXER
203 RADIO RECEIVER
204 DESP-READER
205 CQI RECEPTION TIMING CONTROLLER
206 DEMODU-LATOR
207 BUFFER
208 DECODER
209 SCHEDULER
210 TRANSMIT FRAME GENERATOR
211 MODU-LATOR
212 SPREAD-ER
213 RADIO TRANS-MITTER
220 CQI RECEPTION TIMING PRIORITY DETERMINER
221 MEMORY
CQI UPDATE CYCLE
CQI REPETITION COUNT

FIG.7

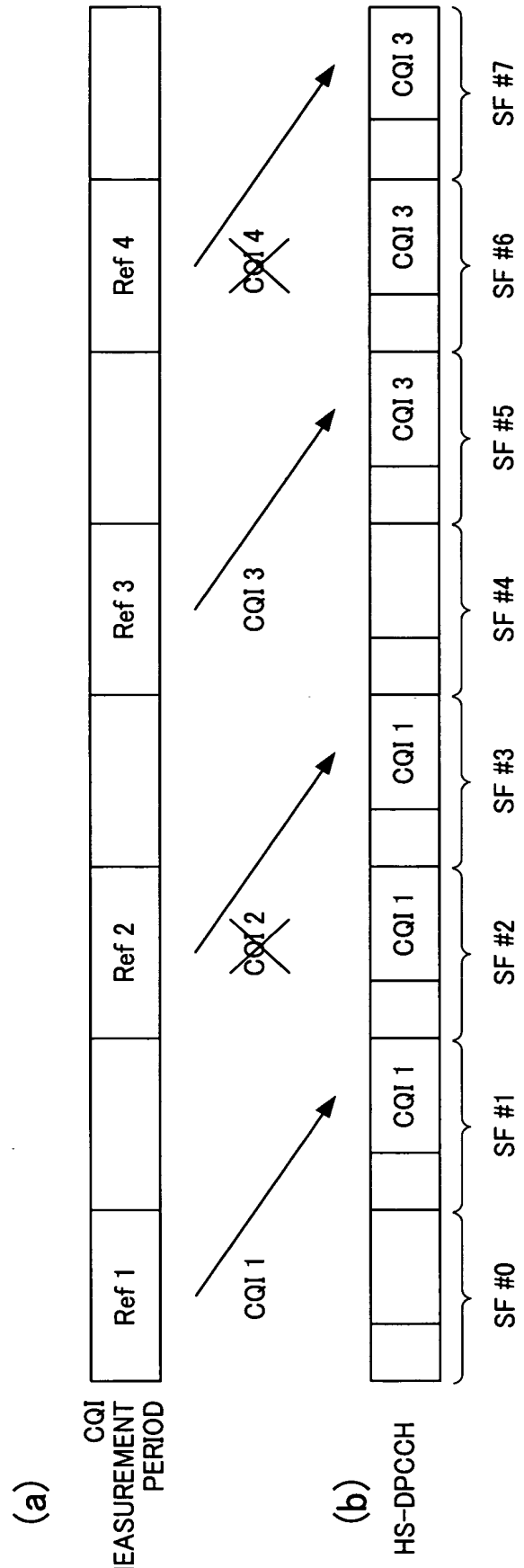

(a)
CQI MEASUREMENT PERIOD
Ref 1
Ref 2
Ref 3
Ref 4
(b)
HS-DPCCH
CQI 1
CQI 2
CQI 3
CQI 4
CQI 1
CQI 1
CQI 1
CQI 3
CQI 3
CQI 3
SF #0
SF #1
SF #2
SF #3
SF #4
SF #5
SF #6
SF #7

FIG.8

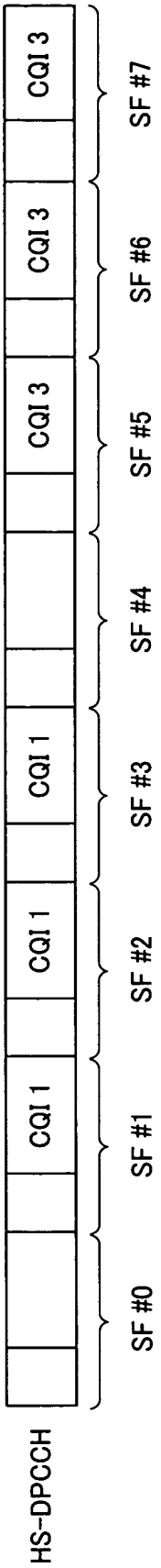

HS-DPCCH
CQI 1
CQI 1
CQI 1
CQI 3
CQI 3
CQI 3
SF #0
SF #1
SF #2
SF #3
SF #4
SF #5
SF #6
SF #7

FIG.9

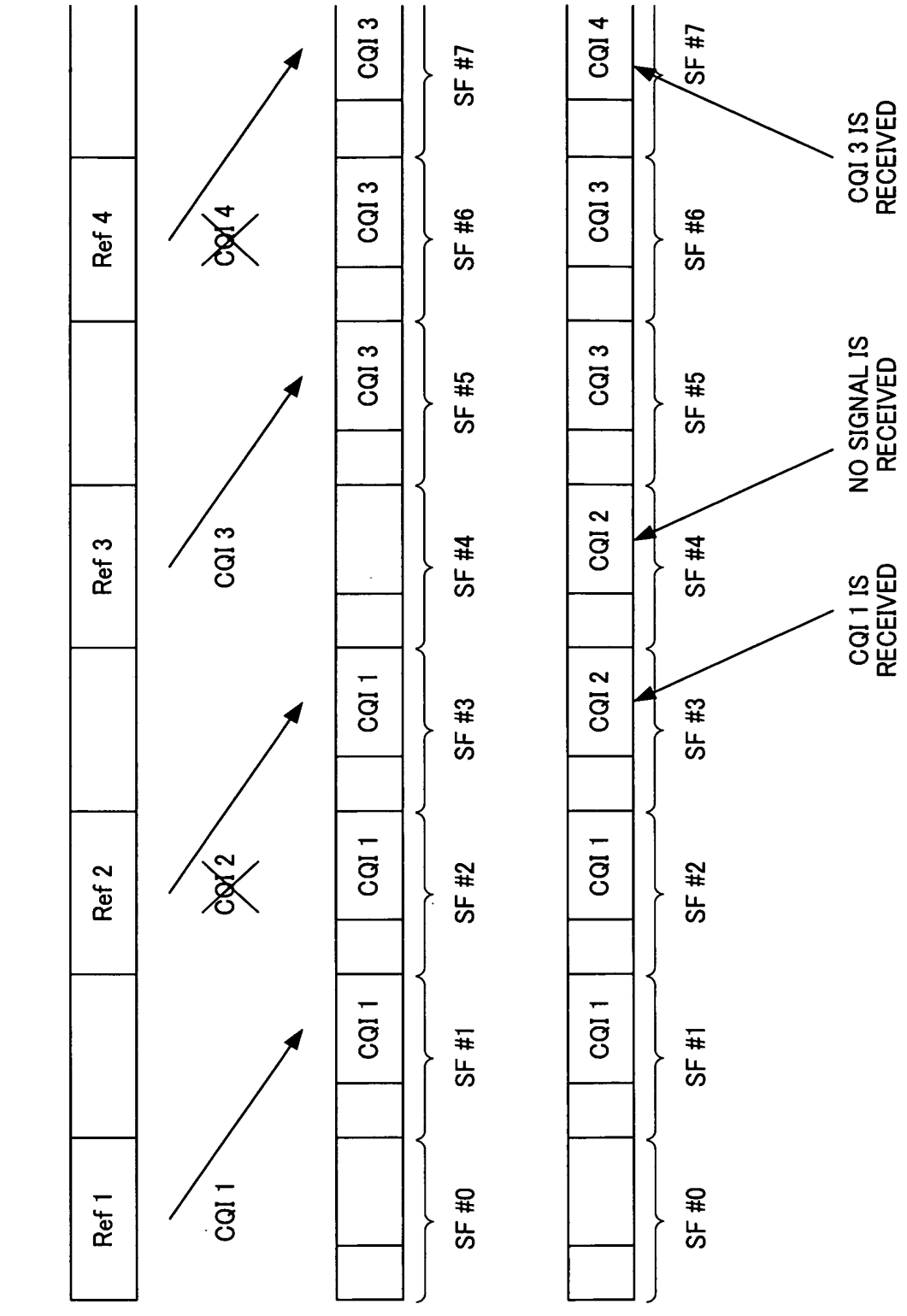

(a)
CQI MEASUREMENT PERIOD
Ref 1
Ref 2
Ref 3
Ref 4
CQI 1
CQI 2
CQI 3
CQI 4
(b)
UE TRANSMISSION
CQI 1
CQI 1
CQI 3
CQI 3
CQI 3
SF #0
SF #1
SF #2
SF #3
SF #4
SF #5
SF #6
SF #7
(c)
BTS RECEPTION
CQI 1
CQI 1
CQI 2
CQI 2
CQI 3
CQI 3
CQI 4
CQI 1 IS RECEIVED
NO SIGNAL IS RECEIVED
CQI 3 IS RECEIVED
SF #0
SF #1
SF #2
SF #3
SF #4
SF #5
SF #6
SF #7

FIG.10

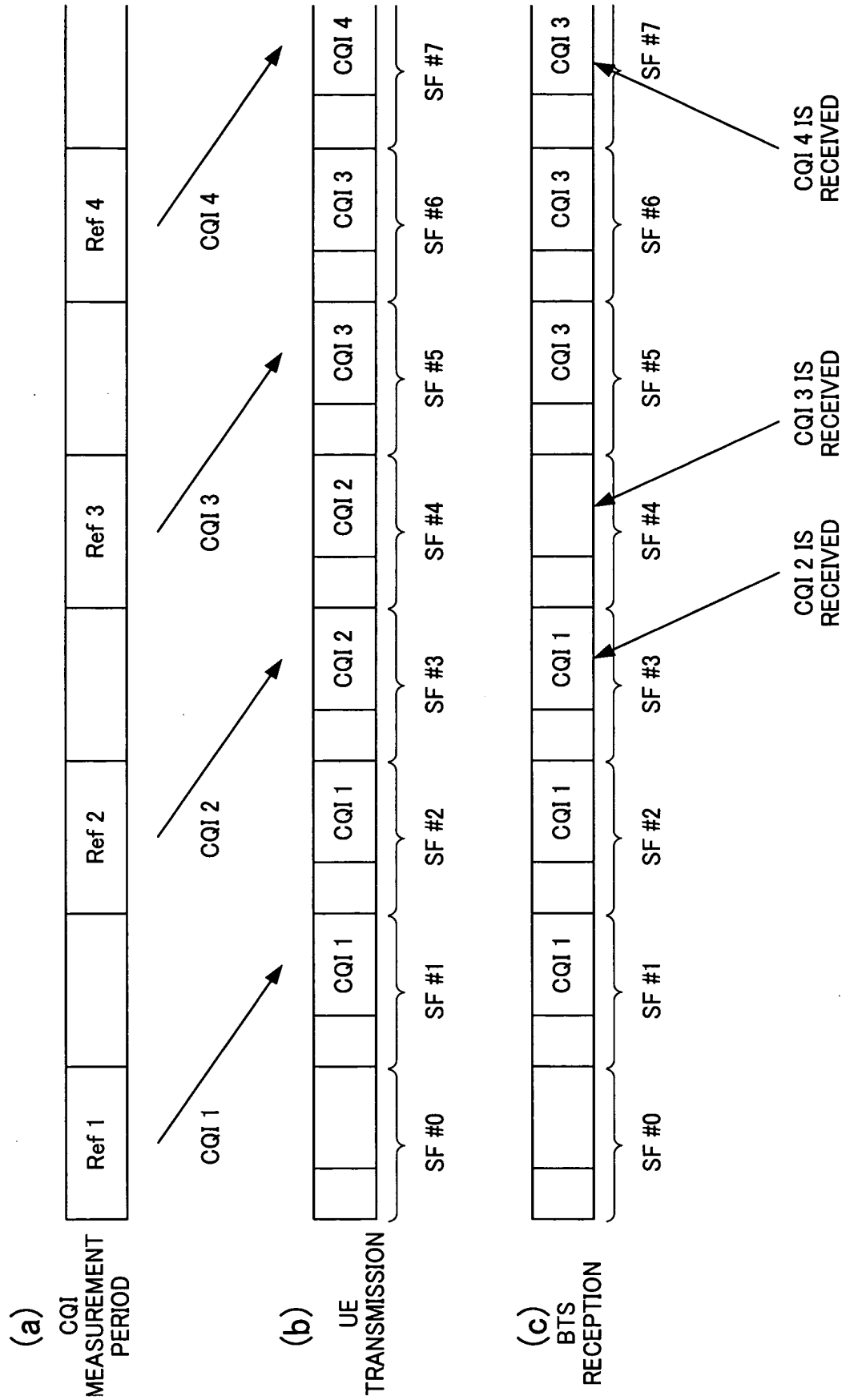

(a)
CQI MEASUREMENT PERIOD
Ref 1
Ref 2
Ref 3
Ref 4
CQI 1
CQI 2
CQI 3
CQI 4
(b)
UE TRANSMISSION
CQI 1
CQI 2
CQI 3
CQI 4
SF #0
SF #1
SF #2
SF #3
SF #4
SF #5
SF #6
SF #7
(c)
BTS RECEPTION
CQI 1
CQI 2
CQI 3
CQI 4
CQI 2 IS RECEIVED
CQI 3 IS RECEIVED
CQI 4 IS RECEIVED
SF #0
SF #1
SF #2
SF #3
SF #4
SF #5
SF #6
SF #7

FIG.11

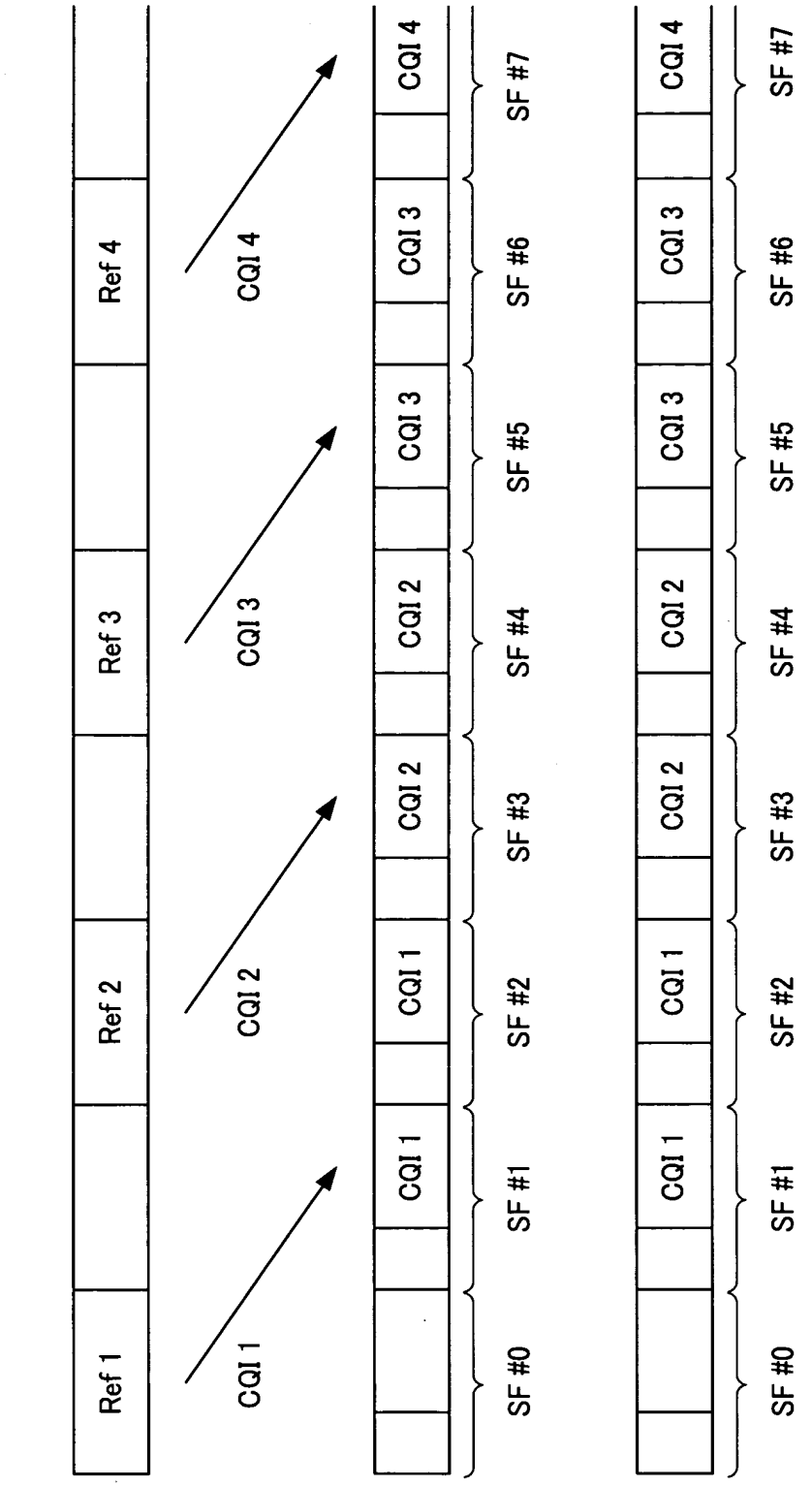

(a)
CQI MEASUREMENT PERIOD
Ref 1
Ref 2
Ref 3
Ref 4
CQI 1
CQI 2
CQI 3
CQI 4
(b)
UE TRANSMISSION
CQI 1
CQI 2
CQI 3
CQI 4
SF #0
SF #1
SF #2
SF #3
SF #4
SF #5
SF #6
SF #7
(c)
BTS RECEPTION
CQI 1
CQI 2
CQI 3
CQI 4
SF #0
SF #1
SF #2
SF #3
SF #4
SF #5
SF #6
SF #7

FIG.12

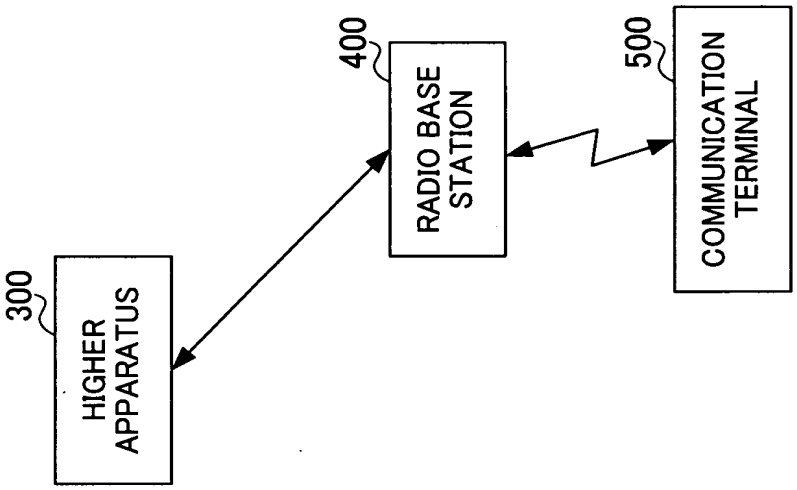

300
HIGHER APPARATUS
400
RADIO BASE STATION
500
COMMUNICATION TERMINAL

FIG.13

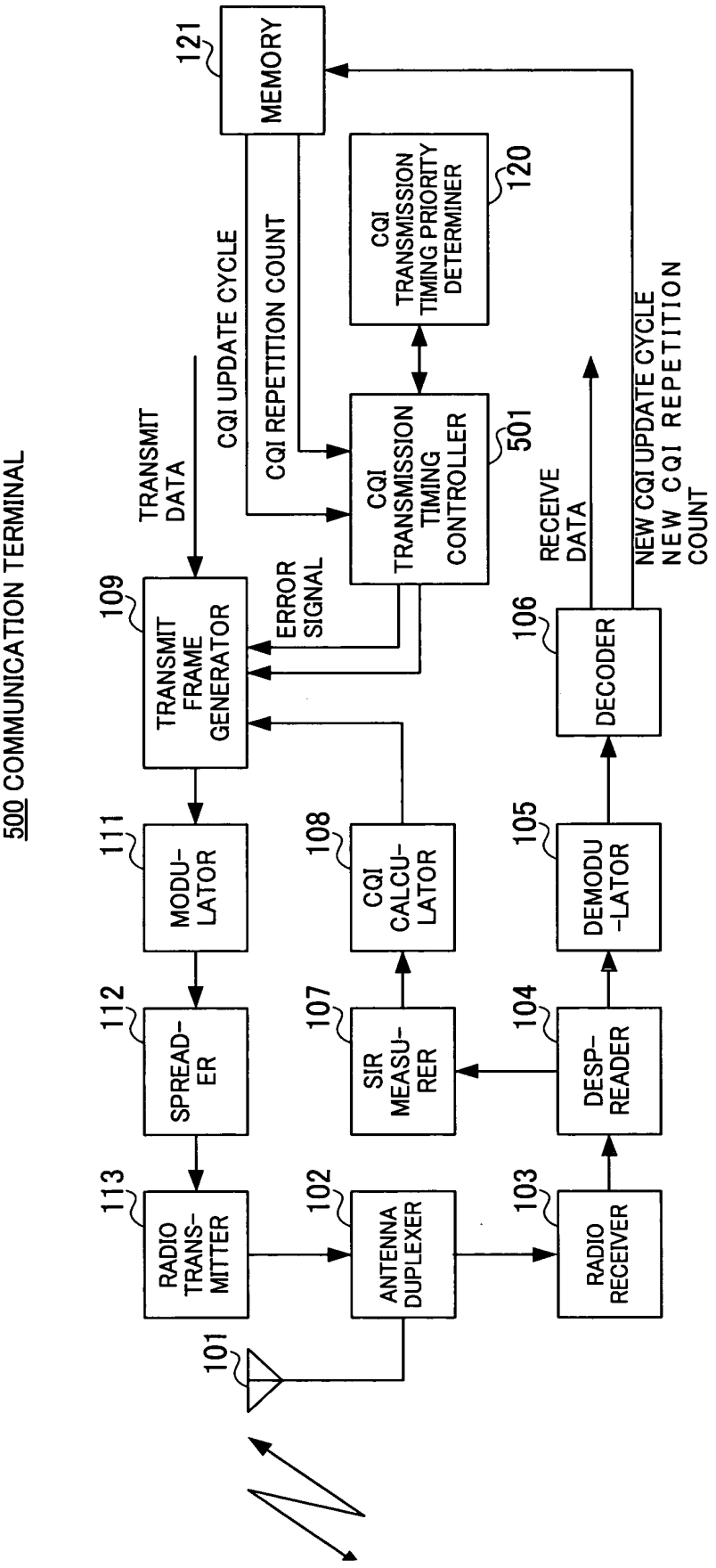

500 COMMUNICATION TERMINAL
121
MEMORY
120
CQI TRANSMISSION TIMING PRIORITY DETERMINER
501
CQI TRANSMISSION TIMING CONTROLLER
CQI UPDATE CYCLE
CQI REPETITION COUNT
TRANSMIT DATA
ERROR SIGNAL
RECEIVE DATA
NEW CQI UPDATE CYCLE
NEW CQI REPETITION COUNT
109
TRANSMIT FRAME GENERATOR
106
DECODER
111
MODU-LATOR
108
CQI CALCU-LATOR
105
DEMODU-LATOR
112
SPREAD-ER
107
SIR MEASU-RER
104
DESP-READER
113
RADIO TRANS-MITTER
102
ANTENNA DUPLEXER
103
RADIO RECEIVER
101

FIG.14

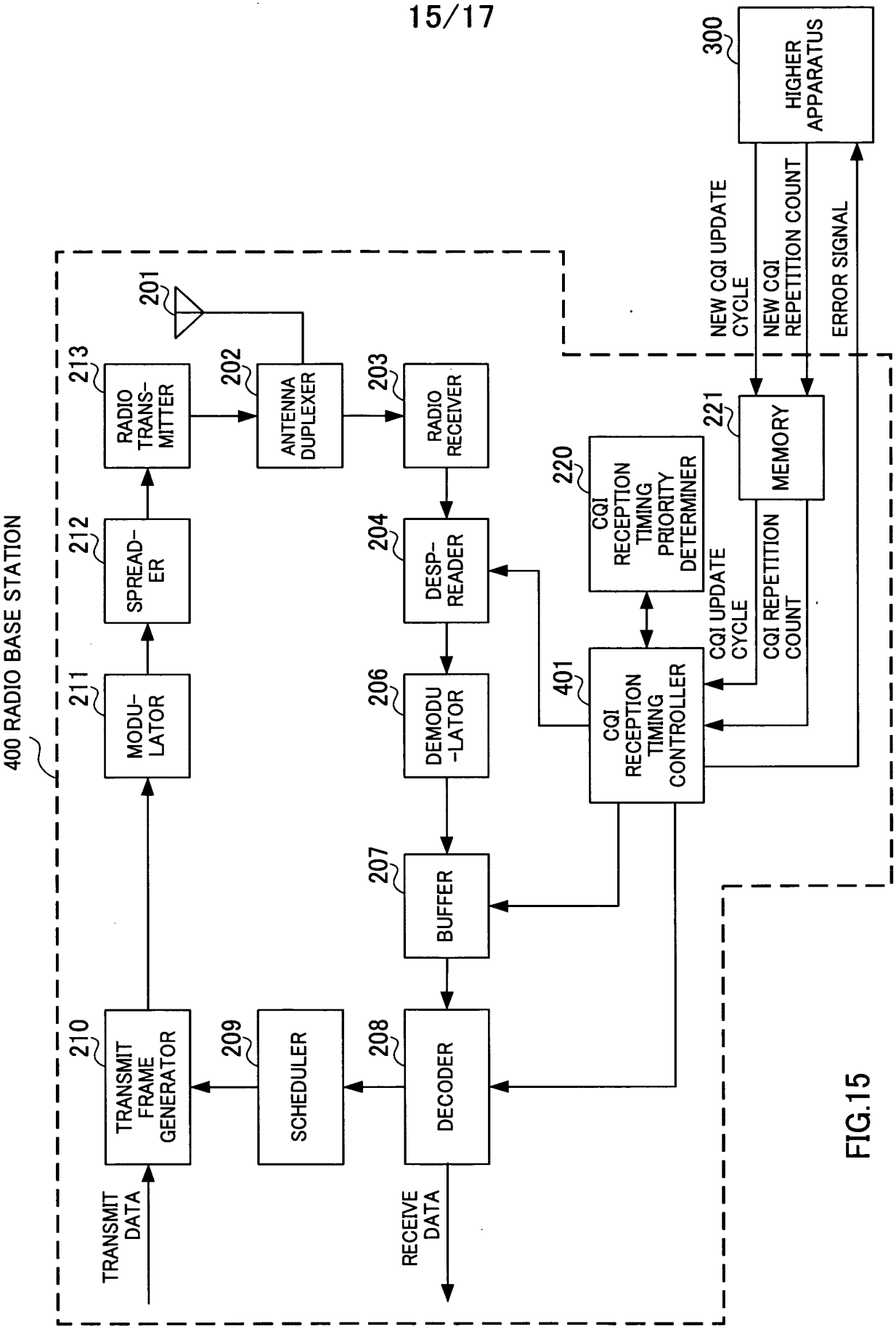

300
HIGHER APPARATUS
NEW CQI UPDATE CYCLE
NEW CQI REPETITION COUNT
ERROR SIGNAL
400 RADIO BASE STATION
201
213
RADIO TRANS-MITTER
202
ANTENNA DUPLEXER
203
RADIO RECEIVER
221
MEMORY
220
CQI RECEPTION TIMING PRIORITY DETERMINER
212
SPREAD-ER
204
DESP-READER
211
MODU-LATOR
206
DEMODU-LATOR
401
CQI RECEPTION TIMING CONTROLLER
CQI UPDATE CYCLE
CQI REPETITION COUNT
207
BUFFER
210
TRANSMIT FRAME GENERATOR
209
SCHEDULER
208
DECODER
TRANSMIT DATA
RECEIVE DATA

FIG.15

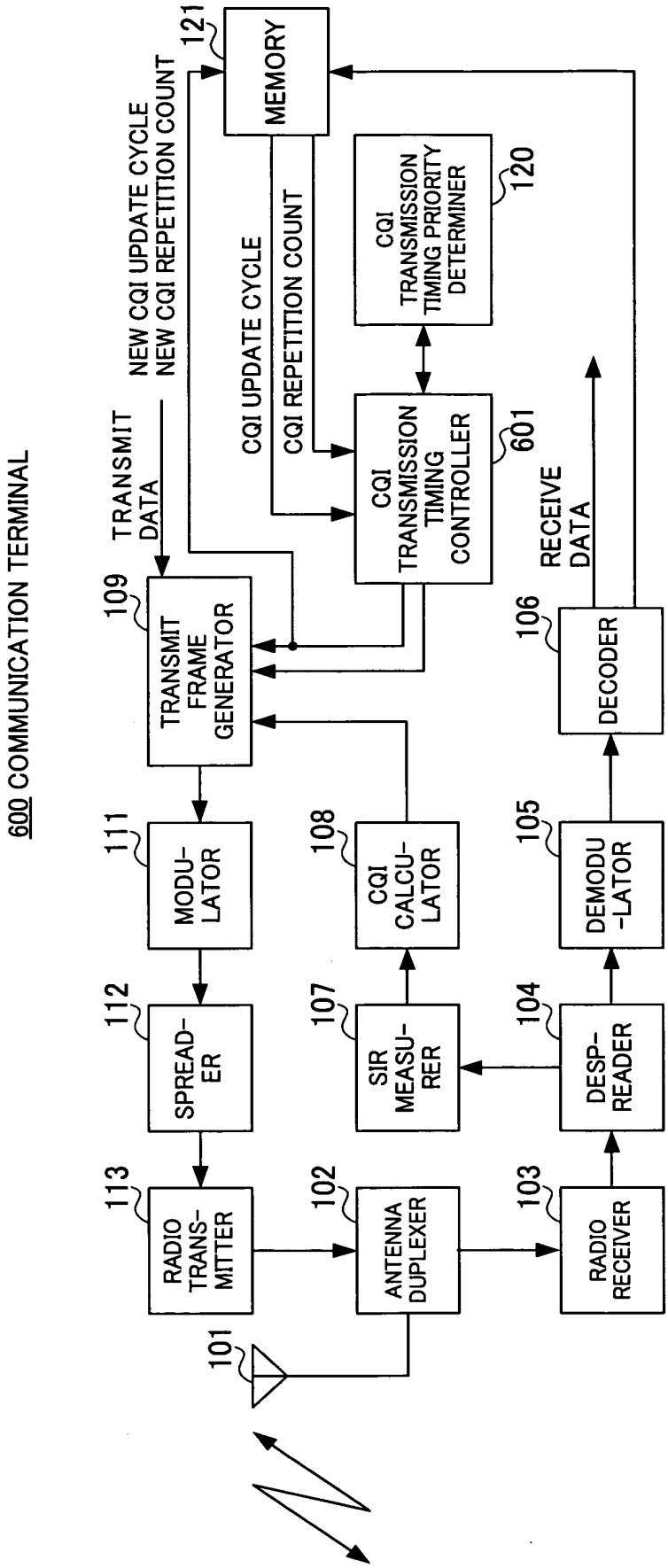

600 COMMUNICATION TERMINAL
MEMORY
121
NEW CQI UPDATE CYCLE
NEW CQI REPETITION COUNT
CQI UPDATE CYCLE
CQI REPETITION COUNT
CQI TRANSMISSION TIMING PRIORITY DETERMINER
120
CQI TRANSMISSION TIMING CONTROLLER
601
TRANSMIT DATA
RECEIVE DATA
109
TRANSMIT FRAME GENERATOR
106
DECODER
111
MODU-LATOR
108
CQI CALCU-LATOR
105
DEMODU-LATOR
112
SPREAD-ER
107
SIR MEASU-RER
104
DESP-READER
113
RADIO TRANS-MITTER
102
ANTENNA DUPLEXER
103
RADIO RECEIVER
101

FIG.16

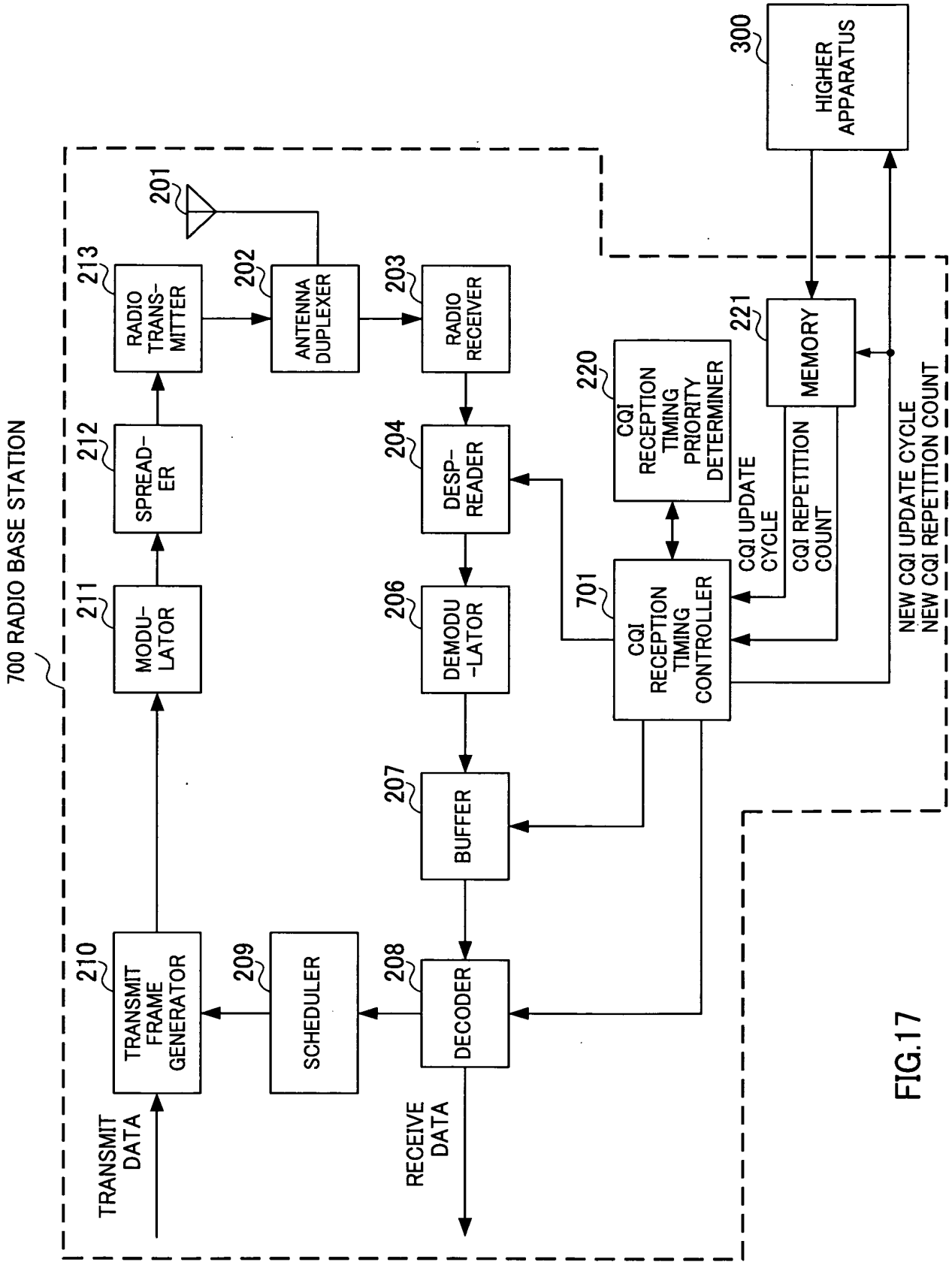

700 RADIO BASE STATION
201
213
RADIO TRANS-MITTER
202
ANTENNA DUPLEXER
203
RADIO RECEIVER
212
SPREAD-ER
204
DESP-READER
211
MODU-LATOR
206
DEMODU-LATOR
207
BUFFER
210
TRANSMIT FRAME GENERATOR
209
SCHEDULER
208
DECODER
TRANSMIT DATA
RECEIVE DATA
220
CQI RECEPTION TIMING PRIORITY DETERMINER
701
CQI RECEPTION TIMING CONTROLLER
221
MEMORY
300
HIGHER APPARATUS
CQI UPDATE CYCLE
CQI REPETITION COUNT
NEW CQI UPDATE CYCLE
NEW CQI REPETITION COUNT

FIG.17